DOCUMENT RESUME

ED 311 262 CE 053 270

AUTHOR Bergren, Garnet Thackeray
TITLE The Feasibility of a Bachelor of Science Degree in Secretarial Technology at Northern Montana College.
PUB DATE Jul 89
NOTE 104p.; Master's thesis, Montana State University.
PUB TYPE Dissertations/Theses - Master Theses (042) -- Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Associate Degrees; *Bachelors Degrees; Communication Skills; Curriculum Development; *Educational Demand; Employment Opportunities; *Employment Practices; Feasibility Studies; Higher Education; Office Automation; Office Management; *Office Occupations Education; *Secretaries; *State Surveys; Word Processing
IDENTIFIERS *Northern Montana College

ABSTRACT

A study was conducted to evaluate the feasibility of offering a bachelor's degree in secretarial technology at Northern Montana College and to examine the office needs of Montana employers in order to suggest curriculum revision and development. Data collection involved a survey instrument mailed to 150 employers (from which 74 usable returns were received) and another survey instrument mailed to 46 students enrolled in the college's associate degree program in secretarial technology (which produced 39 usable returns). The following findings were among the results: (1) postsecondary education in office technology is essential to meet the office needs of employers; (2) employers regard education and experience similarly when selecting a secretary; (3) employers would hire secretaries with bachelor's degrees, although only in large communities would the secretaries receive desirable wages; (4) secretaries in many offices set up and maintain manual, instead of computer, files; (5) written and oral communication skills are important; (6) many students in the associate degree program will seek higher degrees in business; and (7) students would enroll in the bachelor's degree program if it was available. The following curriculum changes were recommended: (1) offer the bachelor of science degree; (2) within the associate degree program, emphasize microcomputer word processing; and (3) offer a course in information management. (The questionnaires and 25 references are included.) (CML)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED311262

THE FEASIBILITY OF A BACHELOR OF SCIENCE DEGREE IN SECRETARIAL TECHNOLOGY AT NORTHERN MONTANA COLLEGE

by

Garnet Thackeray Bergren

A professional paper submitted in partial fulfillment of the requirement for the degree

of

Master of Science

in

Business Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

July 1989

BEST COPY AVAILABLE

CE053270

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

APPROVAL

of a paper submitted by

Garnet Thackeray Bergren

This paper has been read by each member of the committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistence, and is ready for submission to the College of Graduate Studies.

July 12, 1989
Date

Thomas L. Willikinson
Chairperson, Graduate Committee

Approved for the Major Department

July 12, 1989
Date

Thomas L. Willikinson
Head, Major Department

Approved for the College of Graduate Studies

Date

Graduate Dean

STATEMENT OF PERMISSION TO USE

In presenting this paper in partial fulfillment of the requirements for a master's degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this paper are allowable without special permission, provided that accurate acknowledgement of source is made.

Permission for extensive quotation from or reproduction of this paper may be granted by my major professor, or in his/her absence, by the Director of Libraries when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this paper for financial gain shall not be allowed without my written permission.

Signature Garnet T. Bergren

Date July 17, 1989

ACKNOWLEDGEMENTS

The writer wishes to acknowledge gratitude to Dr. Norman Millikin, Chairperson of her graduate committee, for his guidance and assistance. The writer also acknowledges appreciation to Dr. Jerry W. Brown, Vice President for Academic Affairs, Northern Montana College, for his consideration and support. Gratitude is also expressed to John Anderson and Roger Stone, Northern Montana College, for their technical assistance. In addition, the help, encouragement, and support from the Department of Business at Northern Montana College must be recognized.

The writer wishes to acknowledge the contribution of Dr. August Korb, Director of the Montana Center for Vocation Research and Curriculum Development, in the preparation and funding of this paper.

The writer gives recognition to the employers throughout the State of Montana, and the students without whose responses this study would have been impossible.

Special appreciation go to the writer's husband for his understanding, encouragement, and self sacrificing enabling the writer to complete this project.

TABLE OF CONTENTS

Page

List of Tables vi

List of Figures viii

Abstract ix

Chapter

I. INTRODUCTION 1

Statement of the Problem 1
Need for the Study 3
Limitations of the Study 3
Definition of Terms 4
Summary 5

II. REVIEW OF LITERATURE 6

Employment Projections 6
Earnings 8
Education 8
Summary 13

III. PROCEDURES 14

Review of Related Literature 14
Montana Employers 15
Secretarial Students 19
University Survey 21

IV. FINDINGS 22
Employer Survey Summary 51
Student Survey Summary 54
University Survey Summary 56

V. CONCLUSIONS AND RECOMMENDATIONS 58
Conclusions 59
Recommendations 62

Bibliography 70

Appendix A 72

Appendix B 82

Appendix C 88

LIST OF TABLES

Table		Page
1.	Summary of Respondents	22
2.	Secretarial Educational Requirements	23
3.	Multiple Executive\Secretary Relationships	24
4.	Office Specialization	25
5.	Areas of office Specialization	25
6.	Hiring a Secretary The importance of Education and Experience	26
7.	Hiring a Secretary with a Bachelor's Degree	27
8.	Maximum Rate of Pay for Secretaries with a Bachelor's Degree	28
9.	Employers Indicating a Maximum Hourly Wage Greater than $9.39--Strata Distribution	29
10.	Secretarial Skills Beneficial to Employers	30
11.	Technologies to be Considered in the Context of a Four-year Secretarial Technology Curriculum	31
12.	Summary of Student Respondents	34
13.	Marital Status of Respondents	34
14.	Age Groups of Respondents	35
15.	Geographic Origins of the Secretarial Student at Northern Montana College	36
16.	Residential Plans after Graduation	37
17.	Preferred Locations for Seeking Employment in the State of Montana	38
18.	Summary of Respondents Planning to Further Their Education	39
19.	Degrees Selected for Further Study	39
20.	Expected Maximum Rate of Pay for Secretaries with an Associate Degree	40

21. Enrollment Interest in the Bachelor of Science Degree in Secretarial Technology 41

22. Acceptable Rate of Pay for Secretaries with a Bachelor's Degree 41

23. Importance Employers Should Place on Education and Experience When Hiring a Secretary 43

24. Areas of Office Specialization Student Preference 46

25. Effects of Eliminating the Associate of Science Degree in Secretarial Technology 48

26. Northern Montana College Should Offer Only a Bachelor's Degree in Secretarial Science 49

27. Northern Montana College Should Offer Only an Associate Degree in Secretarial Science 49

28. Northern Montana College Should Offer Both an Associate and a Bachelor's Degree in Secretarial Science 50

LIST OF FIGURES

Figure		Page
1.	Factors Influencing Secretarial Wages Employers perspective	27
2.	Wage Expectations for a Secretary with a Bachelors of Science Degree	42
3.	Factors Influencing Secretarial Wages Student Perspective	44
4.	Comparing Factors Influencing Secretarial Wages Student and Employer Respondents	45
5.	Student Interest vs. Employer Needs in Office Specialization	47

ABSTRACT

The purpose of this study was to evaluate the feasibility of a bachelor's degree in secretarial technology at Northern Montana College. A secondary purpose was to examine the office needs of employers with implications for curriculum revision or development.

A survey instrument was mailed to 150 employers throughout the State of Montana, from which 74 usable returns were received. A second survey instrument was mailed to 46 students enrolled in the Secretarial Technology Associate of Science Degree program at Northern Montana College; 39 usable returns were realized.

The research findings led to the identification of the following trends in secretarial training or education at the post secondary level: (1) Post secondary education in office technology is essential to meet the office needs of Montana employers; (2) Montana employers regard education and experience similarly when selecting a secretary; (3) Montana employers would hire a secretary with a bachelor's degree. However, the secretary may need to consider working in one of Montana's larger communities to obtain a desirable wage; (4) while computer use continues to grow, many Montana offices use manual files and require a secretary to set up or maintain one; (5) the importance of written and oral communication skills in the secretarial curriculum is evident.

The research findings of the student survey led to the development of a student profile, and to the following analysis of student opinion (1) many students enrolled in the secretarial program at Northern Montana College will seek higher degrees in business; (2) students believe that Northern Montana College should offer both an associate and a bachelor's degree in secretarial technology; (3) students would enroll in the Bachelor of Science Degree in Secretarial Technology if it were available at Northern Montana College, (4) the Northern Montana College secretarial student is typically an nontraditional student from Northern Montana.

The writer recommended curriculum changes in the associate degree program at Northern Montana College emphasizing microcomputer word processing and reinstating a course in records (information) management. In addition, the writer recommended that Northern Montana College pursue the Bachelor of Science Degree in Office Administration.

CHAPTER 1

INTRODUCTION

In a paper submitted to the National Business Education Association in 1987, Clayton and Park wrote

> Several four-year colleges/universities have either dropped their associate degree program or modified or added a four-year administrative secretarial/clerical program. More emphasis has been placed on administrative/managerial activities, especially decision making. In many cases, graduates of these programs aspire to be certified professional secretaries.

Of 222,753 Bachelor of Science Degrees in business and management conferred in 1984, 1,183 were issued to secretarial and office related fields. Government statistics further indicate that of the 1,183 Bachelor of Science Degrees issued in the secretarial and office related field, 146 were issued to men while women received 1,039. In 1983, 20,830 Associate of Science Degrees in Secretarial Technology were conferred, 235 to men. (Digest of Educational Statistics, 1987: 175).

As a result, the writer became interested in college degrees available in secretarial and office related fields.

Statement of the Problem

The purpose of this study was to determine the feasibility of revising the curriculum at Northern Montana College to include a Bachelor of Science Degree in Secretarial Technology.

The specific questions to be answered in this study were:

1. What is the profile of the Northern Montana College student enrolled in the Secretarial Technology Associate of Science Degree program?

2. Would students have selected Northern Montana College if an Associate Degree in Secretarial Science had not be available?

3. Would students of the Associate of Science Degree pursue a Bachelor of Science Degree?

4. What would graduates of the Associate of Science Degree hope to earn annually? How much would a graduate of a Bachelor of Science Degree expect to earn annually?

5. In what areas of office specialization are secretarial students interested in?

6. What factors do secretarial students feel should affect wages and promotions?

7. What skills do employers prefer their secretaries possess?

8. Do employers prefer to hire college trained secretaries?

9. What are employers willing to pay a secretary with a Bachelor of Science Degree?

10. Could credits earned in the Associate of Sciences program be used for credit in a Bachelor of Science program?

11. Is there a market for a Bachelor of Science Degree in Secretarial Technology at Northern Montana College?

12. Would additional courses be necessary for the Bachelor of Science Degree? Would additional faculty be required?

13. Should Northern Montana College retain the Secretarial Technology Associate of Science Degree if it is recommended that a bachelor's degree be pursued?

Need for the Study

This study was important because it concerned the needs of the student, and the needs of the communities that Northern Montana College serves. It is important to consider trends in business and industry in order to up-date office occupation education curriculum. It is important to compare differences between a two-year and a four-year business degree to allow the learner an informed choice.

Anthony Urbaniak (1985:206) said

> Government, the public, and our students will continue to desire much from us. In the 1980s, we all have tremendous opportunity to individually, professionally, and institutionally evaluate our programs.

Limitations of the Study

The following limitations were placed on the study:

1. Participating employers were limited to 150 professional service employers throughout the State of Montana.

2. The Employment and Wage report used to stratify the sample excluded from its figures individuals in employment of a son, daughter or spouse; Railroad employees; real estate and insurance salespeople paid solely by commission; student workers, inmate workers or patient workers; elected officials; and church employees.

3. Student participants were limited to students currently enrolled in the Secretarial Technology Associate of Science Degree program at Northern Montana College.

4. Research material was limited to that found in the Roland R. Renne Library, Montana State University; Admission's Office at Northern Montana College; Vande Bogart Library, Northern Montana College; and in the personal library of the writer.

Definition of Terms

Associate of Science. The degree conferred by some colleges for the completion of two-years college work beyond high school, emphasizing science or certain technical or professional fields. (Dictionary of Education, 1959)

Bachelor of Science. The degree conferred by institutions of higher education for the completion of a four-year curriculum with emphasis on science or certain technical or professional fields. (Dictionary of Education, 1959)

Northern Montana College (NMC). A medium sized co-educational institution and one of the six units of the Montana University Systems. Located in Havre, Montana, NMC has an average student body of 1700. (Northern Montana College Catalog, 1988-1990:24)

Office Related Fields. Bookkeepers, receptionists, stenographers, office managers, typist, and other clerical work. (Dictionary of Education, 1959)

Secretarial Technology. Instruction and practice in the duties performed by secretaries, given at the secondary or the college level. (Dictionary of Education, 1959)

Secretary. Performs a variety of administrative and clerical duties that are necessary to run and maintain organizations efficiently. (Dictionary of Education, 1959)

Summary

Men and women interested in office occupations are pursuing bachelor degrees. Advances in technology has required a more sophisticated work force; therefore, comparing curriculum and business trends is necessary to keep abreast of advancing technical changes.

Northern Montana College has expressed an interest in up grading its curriculum to include a Bachelor of Science Degree in Secretarial Technology. Through examination of student and employer interests, curriculum and faculty needs, the writer pursued this study to determine the feasibility of adding a Bachelor of Science Degree in Secretarial Technology to Northern Montana College's curriculum.

Chapter II

REVIEW OF LITERATURE

The purpose of this chapter was to review recent literature published in the area of secretarial education and employment. The writer also intended to review literature available on curriculum guidelines for professional degree in secretarial technology.

This chapter includes a review of literature in the following areas:

1. Job prospects for the 1990s
   a. changing roles
2. Earnings
3. Education
   a. background
   b. skill assessment
   c. curriculum needs

Employment Projections

Secretarial jobs are expected to grow more slowly than the average for all occupations through the year 2000 due to increased productivity resulting from office automation. The majority of the 3,064,400 secretarial jobs predicted to be available in 1995 will be filled by people who have not been working. Most of the entrants will have been full-time homemakers between the ages of 25 and 54. (Bureau of Labor Statistics, 1988:245-46)

Fusselman compared data collected from 1987 and 1988 help wanted advertisements to determine that advertisements requesting secretarial help had increased 25.6% since 1987. The Secretarial Help Wanted Advertisement Survey has been conducted annually since 1982. The survey reviewed adds placed in newspapers in 29 cities in the United States, Canada, and San Juan, Puerto Rico. The surveys were conducted by THE SECRETARY magazine, and sponsored by the Professional Secretaries International Research and Educational Foundation. (Fusselman, 1988:14)

Changing Roles. In an article submitted to the New York Times, Hall wrote

> Because machines are taking over so many duties, companies do not need as many secretaries. The secretaries who remain tend to work for more people. Employers have been seeking secretaries who will work for at least three people and often many more.

The Bureau of Labor Statistics supported this trend. With continuing advances in office automation, employers will be seeking secretaries who are versatile and adaptable.

The 1988 Secretarial Help Wanted Advertisement Survey indicated that 47.6% of all the adds surveyed required word processing and computer skills; 60% of the adds surveyed requested an industry specialist. Areas most frequently requesting specialists were public relations, personnel, finance, insurance, real estate, and marketing. (Fusselman, 1987:10)

Earnings

In a quote from USA TODAY an unknown author said

> The nations 4,600,000 secretaries and office services personnel are becoming more and more willing to change companies--and even to relocate to other cities to increase their income.

The Professional Secretaries International, (PSI), randomly surveyed 1,200 members of PSI. Most of the respondents claimed salary as the most important job factor. (Fusselman, 1987:10).

In 1987, salaries ranged in the United States from $7,800 to $50,000. (Fusselman, 1988:16) Salaries varied because of level of skill, experience, responsibility, company size, and geographic location. The average salary for secretaries in the Northwest was $19,968; in the Midwest, $20,410; in the West, $21,840; salaries from the Southern U.S. were $19,266. (Bureau of Labor Statistics, 1988:246)

Reflected in the PSI ad survey, experience, rather than education, influenced compensation. (Fusselman, 1988:15)

Education

Background. 3.8% of advertisements studied in the 1988 Secretarial Help Wanted Advertisement Survey requested some type of post secondary education. (Fusselman, 1988:15)

A membership survey sponsored by PSI concluded that 95% of the respondents did have some type of post secondary education; 40% had completed a secretarial program, 43% had some college classes, while 10% had a bachelor's degree and

2% had master's or doctoral degrees. Seventeen percent of the respondents were enrolled in a college course. (Fusselman, 1987:9)

Skill assessments. Most commonly requested skills in the Secretarial Help Wanted Advertisement survey were word processing and computer usage including spreadsheet, database, and computer graphics followed by organizational, communication, secretarial, and math/bookkeeping skills. Other skills requested included telephone, initiative/self starter, spelling and grammar. Employers expressed interest in administrative skills, bilingual ability, interpersonal and writing skills. Personality, confidentiality and supervisory skills were also mentioned. (Fusselman, 1987:16)

While the demand for stenographers has declined, the demand for typists is likely to be strong. (THE SECRETARY, Oct. 1986:5) The PSI newspaper ad survey concluded that 51.5% of executive secretary jobs listing required shorthand, 40% of the listing required typing speeds of 70 wpm or more. (Fusselman, 1988:15)

Curriculum Needs. Technology has changed the skills employers need from clerical help. Shirley White in an address to the National Business Education Association (NBEA) defined the implications to business educators

> In order for students to be prepared for the changing office environment, the secretarial training program must remain up to date and reflect the current trends and developments in the business world. Therefore, business educators may need to introduce new courses.

In August of 1984, Cheri Annette Jimeno completed a nationwide study of Business Education curriculum at the two-year post secondary level. Jimeno randomly selected 240 community colleges listed in the 1983 Community, Technical and Junior College Directory to survey for her study.

Word Processing

Word processing continues to be a popular course in the secretarial curriculum. Terminology as well as a hands-on approach are frequently incorporated into the word processing curriculum. (Jimeno 1984:58)

Word processing courses often incorporate keyboarding/typewriting skills into the course curriculum, (Perry, Johnson), or teach keyboarding on word processing equipment.

Computer Graphics

One-third of the schools that Jimeno surveyed indicated that computer graphics should be taught; 11 percent indicated that it was taught as a separate course. (Jimeno 1984:53) Computer graphics was often included in courses such as "Information Processing", "Personal Computing", or "Introduction to Computing". (Cleveland, Perry, Johnson)

Information (Records) Management

Trends in Business Education indicate the use of the term "information management" rather than "records management". (Jimeno 1984:58). In analyzing trends in office education

curriculum, Jimeno's study determined that concepts such as CAR, (Computer Aided Retrieval), COM, (Computer Output Microfilm), micrographies, electronic mail, telecommunications, and facsimile systems are being taught in word processing courses or in courses dealing with records management. Contacts the writer made with several post secondary institutions supported Jimeno's findings. Concepts taught in "Information Management" included manual filing), micrographies, (including a discussion of COM, CAR, and CIM, reprographics, electronic mail, telecommunications and facsimile systems. Theoretical discussions of these technologies also occurred in courses named "Secretarial Procedures", "Office Procedures", and "Fundamentals of Data Processing".

Business Communication

"The importance of oral and written communication skills in an office systems technology curriculum is evident." (Jimeno 1984:56) English and Speech were emphasized as general education requirements in most of the schools contacted. Interpersonal skills were usually included in Business Communication or Office Procedures classes.

Naming the four-year degree. Tilton, Jackson, and Popham considered the term "secretary" unclear and misunderstood.

> The secretarial classification is perhaps one of the least understood in office occupations. Many employers are unclear as to what a professional secretary is expected to do on the job...

The Professional Secretaries International (PSI) defined a secretary as an executive or administrative assistant. The Administrative Management Society (AMS) employed the same terms. (Tilton 1987:5)

Northern State College in Aberdeen, SD, used the term "Administrative Systems" to define its four-year degree. Walla Walla College, College Place, WA, Black Hills State College in Spearfish, SD, and Valley City State College in Valley City, ND, named their degree "Office Administration". Other titles included "Office Administration and Management", and "Administrative Processor".

Summary

The Bureau of Labor Statistics predicted a slow growth in employment projections for secretaries through the year 2000 due to the affect of office automation. Kay Fusselman, a writer for THE SECRETARY magazine, reported an increase in secretarial positions in 1987 and 1988.

Office automation has changed the role of today's secretary; machines are performing many of the duties normally completed by a secretary. Employers are seeking secretaries who are versatile, adaptable, and willing to work for more than one executive. Employers preferred a secretary with skills in word processing and computer usage. The demand for stenographers has declined; however, executive secretary job listings still required shorthand.

Working secretaries considered salary as the most important job factor; many secretaries were willing to relocate to obtain a higher wage. Nationally, secretarial salaries range from $7,800 to $50,000. Salaries varied because of skill level, experience, responsibility, company size, and geographic location.

Business educators stressed the importance of office education curriculum reflecting the changing office environment. Many post secondary institutions were evaluating and up-grading their current office education curriculum.

CHAPTER III

PROCEDURES

This study was undertaken to determine the feasibility of revising the office education curriculum at Northern Montana College to include a four-year degree in secretarial technology. Approval for the study was obtained from Jerry W. Brown, Vice President for Academic Affairs, Northern Montana College in September of 1988.

This chapter outlines the procedures followed in completing the study.

The following areas were examined:

1. Sources of Data
2. Construction of Data Instrument
3. Administration of the Survey Instrument.

SOURCES OF DATA

Review of Related Literature

This study was begun in June of 1988. An analysis of applicable articles concerning post secondary degrees in office education, employer needs, and secretarial earnings were obtained from the Roland R. Renne Library, Montana State University, the Vande Bogart Library, Northern Montana College, and from the personal library of the writer.

MONTANA EMPLOYERS

A questionnaire was sent to 150 businesses in Montana. Employers surveyed included those involved in the medical profession, the legal profession, insurance, sales/marketing, accounting, real estate, engineering, school administration, and private investigations.

The Montana Center for Vocational Education Research, Curriculum and Personnel Development under the direction of A.W. "Gus" Korb agreed to fund the employer survey. The Center paid for postage, stationary, and copying expenses.

Construction of the Questionnaire

The construction of the questionnaire was developed to reflect the "questions to be answered" section presented after the problem statement in Chapter One. As a result of the review of literature, the writer focused the "questions to be answered" on trends and future projections for the professional secretary.

The initial questionnaire was critique by Dr. A.W. "Gus" Korb, Director of the Montana Center for Vocational Education Research, Curriculum and Personnel Development, and by Dr. Norm Millikin, Graduate Coordinator of Business Education, Montana State University. Revisions were made to clarify the questions and improve the format of the instrument. The revised document was approved for use on October 20, 1988.

Selection of Participants for the Survey

It was the intention of the writer to randomly survey employers in the State of Montana occupied in professional service businesses; the sample size was determined to be 150 participants.

A stratified random sampling was employed to insure equal representation of employers throughout the state. The sample was divided into three strata based on gross wages reported on quarterly contribution reports from employers covered by the unemployment insurance law. The Research and Analysis Bureau of the Department of Labor and Industry, State of Montana, compile employer quarterly wage reports annually into a statewide table illustrating gross wages paid in each county. The writer arranged the table in ascending order according to gross wages paid and divided the table into three strata.

Stratum One represented counties reporting gross wages over 365 million dollars, 40% of total wages paid ($4,129,309,191). Sixty participants, 40 percent of the sample, were randomly selected from Stratum One. Included in this Strata were Billings, Huntley, and Laurel from Yellowstone County: Great Falls, Belt and Cascade from Cascade County: Missoula from Missoula County.

Counties reporting gross wages over 89 million dollars, 30% of total wages paid, made up Stratum Two; forty-five participants, 30 percent of the sample, were randomly selected

from counties included in Stratum Two. Counties included in Strata Two were Gallatin County, Flathead County, Silver Bow County, Hill County, and Lewis and Clark County. Surveys were sent to employers in Bozeman, Butte, Hardin, Helena, Havre, and Kalispell.

Counties reporting gross wages less than 89 million dollars, 30% of total wages paid in Montana, compiled Stratum Three. Forty-five employers, 30 percent of all participants, were randomly chosen to define Stratum Three. Counties participating in Strata Three were Big Horn County, Blaine County, Beaverhead County, Broadwater County, Carbon County, Deer Lodge County, Fallon County Fergus County, Glacier County, Ravalli County, Richland County, Toole County, and Valley County.

Cities surveyed for Stratum Three included Anaconda, Baker, Chinook, Cut Bank, Dillon, Fort Benton, Glasgow, Hamilton, Harlem, Lewistown, Malta, Miles City, Red Lodge, Shelby, Sidney, and Townsend.

Random selection of participants from each strata was made by selecting every third qualifying business from the yellow pages of county telephone books. From that complied list, every third business was selected until the required stratum size was met.

Administration of the Survey Instrument

The survey instrument was sent to 150 employers throughout Montana on October 28, 1988. (Appendix p75) A cover letter (Appendix p73) accompanied the survey instrument. A stamped, self-addressed envelope was enclosed for the convenience of the respondent in hope of insuring a high percentage of return. Respondents were asked to return the instrument by November 15, 1988. Thirty-five, 23 percent, responded by that date. A follow-up letter accompanied with a survey instrument and a stamped, self addressed envelope was mailed to employers not responding on November 16, 1988. (Appendix p74) Resulting from the follow-up, a 50% (75 of 150) return was realized. Seventy-four of the 75 questionnaires returned were considered usable.

SECRETARIAL STUDENTS

A questionnaire was sent to 46 students enrolled in the Secretarial Technology Associate of Science Degree at Northern Montana College.

Construction of the Questionnaire

The questionnaire was designed to develop a profile of the secretarial students enrolled at Northern Montana College. In addition, the questionnaire was designed to focus on the trends in office work as projected by research of current literature.

The initial questionnaire was critique by Dr. Norm Millikin, Graduate Coordinator of Business Education, Montana State University. Revisions were made to clarify the questions and improve the format of the instrument. The revised document was approved for use on October 20, 1988.

Selection of Participants for the Survey

A list of students registered in the Secretarial Technology Associate of Science Degree program at Northern Montana College was obtained with the permission of Dr. Roger Barber, Chairman, Department of Business, from the Office of Admissions, Northern Montana College. All 46 students on the list were included in the sample.

Administration of the Survey Instrument

The questionnaire was sent to all secretarial students enrolled at Northern Montana College on November 4, 1988. (Appendix p85) A cover letter (Appendix p83) accompanied the questionnaire. A stamped and self-addressed envelope was enclosed in hope of insuring a high return. Respondents were asked to return the questionnaire by November 18, 1988. Thirty-four, 74 percent, returned the questionnaire on or before that date. A follow-up letter (Appendix p84), questionnaire and stamped, self-addressed envelope were sent to the students who had not responded on November 25, 1988. An additional five returns were realized for a total usable return of 39, or 85 percent.

Analysis of Data

Responses from the 74 usable employers returns and the 39 usable student returns were tabulated and compiled in order to summarize the data. Tables and figures were designed to present the information in an understandable form.

In several instances, comparisons were made between student and employer responses.

UNIVERSITY SURVEY

A third questionnaire was designed to survey colleges or universities located in the Northwestern United States that offer a bachelor's degree in office education. A second criteria for selection was that the college or university have a similar enrollment figure, (approximately 1700), to Northern Montana College. Nine institutions met both criteria (Appendix p89).

The questionnaire and cover letter (Appendix p90, p92) were mailed on February 10, 1989, to qualified schools. A stamped and self-addressed envelope was enclosed to encourage a good response. Six out of nine questionnaires were returned before February 27, 1989.

A follow-up letter (Appendix p91) and another questionnaire were sent on February 28, 1989, to schools that had not responded; a stamped and self-addressed envelope was again included to encourage response. One out of three questionnaires were returned for a total of seven out of nine.

Because the writer believes that information abstracted from this survey cannot be scientifically portrayed in tables and figures, the writer has chosen to summarize the information in paragraph form in Chapter Four, Findings.

CHAPTER IV

FINDINGS

Introduction

This chapter presents a tabulation and analysis of the data obtained from the survey of employers in Montana, as well as the survey of students of the Secretarial Technology Associate of Science Degree at Northern Montana College.

Employer Survey

TABLE 1

SUMMARY OF RESPONDENTS

Employers Responding	Amount	Percent
Strata One	26	43
Strata Two	23	51
Strata Three	26	58
Totals	150	
Usable	74	49
Unusable	1	1
No Response	70	47
Return unopened	5	3
Totals	150	100%

Questionnaires were mailed to 150 stratified, randomly selected employers. As indicated in Table 1, seventy-five, or 50 percent of the employers responded. Only one employer indicated, in the margins of the questionnaire, that he did not employ a secretary; this response was considered unusable. Five questionnaires were returned unopened as the employer had

moved or discontinued operation. Therefore, 74, or 49 percent, of the 150 employers selected were considered usable.

Table 1 further illustrates strata distribution of respondents. From Stratum One a return of 43 percent was realized (26 out of 60), a return of 51 percent was acquired from Stratum Two (23 out of 45). Twenty-six out of 45 employers responded from Stratum Three for a return of 58 percent.

TABLE 2
SECRETARIAL EDUCATIONAL REQUIREMENTS

Education	Frequency	Percentage
High School Diploma	11	15
Post Secondary	63	85
	74	100 %
One-year of college	8	13
Two-year secretarial Degree	50	79
Four-year secretarial	3	5
Vocational certification	2	3
	63	100 %

Respondents were asked to fill out the questionnaire as it applied to their present and projected office needs. Table 2 illustrates the level of secretarial education or training employers felt would best meet their office situation.

A high school diploma satisfied the educational requirement of 15 percent of the respondents, while 85 percent

of the respondents preferred a secretary with post secondary training. Most employers, (79 percent), indicated that a two-year secretarial degree would meet their post secondary educational requirements.

TABLE 3
MULTIPLE EXECUTIVES\SECRETARY RELATIONSHIPS

Number of Executives	Frequency	Percentage
One	29	39.2
Two	18	24.3
Three	12	16.2
Four	7	9.5
Five	5	6.7
Six	2	2.7
Seven	1	1.4
TOTALS	74	100%

Forty-five (60.8%) of the respondents signified that secretaries employed in their firms worked for more than one executive. Secretaries worked for only one executive in firms represented by twenty-nine (39.2%) of the respondents. The quantitative relationship between employer and secretary is illustrated on Table 3.

TABLE 4

SUBJECT: OFFICE SPECIALIZATION

Explanation	f	%	Wages	f	%
Would Benefit	28	38	Would pay more	27	36.5
Would Not Benefit	40	54	Would not pay more	32	43.3
No Response	6	8	No Response	15	20.2
TOTALS	74	100		74	100.0

Approximately 38 percent of the respondents revealed that an industry office specialist would be an asset to their firm; 36.5 percent of the respondents were willing to pay an industry specialist more than a general secretary. Table 4 illustrates that a majority of employers would not benefit from an office specialists.

TABLE 5

AREAS OF OFFICE SPECIALIZATION

Area of Specialization	Frequency	Percentage
Real Estate	5	11
Personnel	6	14
Marketing	6	14
Legal	5	11
Insurance	5	11
Finance	4	10
Medical	5	11
Other	8	18
TOTAL	44*	100%

*Many of the 28 respondents who indicated that an office specialist would benefit their firm chose several areas of specialization, therefore, the frequency of occurrence column totals 44.

Preference of area of specialization is illustrated in Table 5. Suggestions for areas of specialization not mentioned on the list included office management, mining, accounting, architecture, utility management, education, and engineering.

TABLE 6
HIRING A SECRETARY
THE IMPORTANCE OF EDUCATION AND EXPERIENCE

Subject	Not Important	Somewhat Important	Important	Very Important
Education	4%	18%	32%	46%
Experience	4%	19%	28%	49%

When hiring a secretary, 46 percent (34 out of 74) of the respondents considered education very important in selecting candidates; 49 percent (36 out of 74) felt that experience was very important. Table 6 illustrates that employers weighed education and experience similarly when choosing a secretary.

FIGURE 1

FACTORS INFLUENCING SECRETARIAL WAGES

Figure 1 demonstrates how employers deemed education, experience, and job responsibilities influence secretarial wages. Thirty-five percent of the respondents regarded education as very influential, 58% considered experience very influential, while 65% felt that responsibilities were the most influential factor affecting secretarial wages. Employers regarded job responsibilities as the most influential factor affecting secretarial wages.

TABLE 7
HIRING A SECRETARY WITH A BACHELOR'S DEGREE

Explanation	Yes	Percent	No	Percent
Stratum One	18	24.3	9	12.2
Stratum Two	19	25.6	3	4.0
Stratum Three	21	28.3	4	5.4
Totals	58	78.2	15	21.8

Approximately 78 percent (58 out of 74) respondents said they would hire a secretary with a bachelor's degree as illustrated in Table 7. Employers were willing to hire a secretary with a four-year degree.

TABLE 8
MAXIMUM RATE OF PAY FOR SECRETARIES
WITH A BACHELOR'S DEGREE

Hourly Rate of Pay	Annual Rate of Pay	f	Percent	Total Percent
$ 4.55	$ 8,736.00	1	1.7	
5.76	11,059.20	3	5.2	
6.97	13,382.40	18	31.0	
				37.9
8.18	15,705.60	16	27.6	
				27.6
9.39	18,028.80	10	17.2	
10.60	20,352.00	5	8.6	
> 10.61		3	5.2	
				31.0
State Scale		2	3.4	3.4
Totals		58*		99.99%

*Employers who had responded "yes" to the hiring of a secretary with a B.S. Degree were asked to respond to this question, therefore, N=58.

The most frequently selected maximum rate that employers were willing to pay a secretary with such a degree was 6.97 per hour, or $13,382.40 annually. Tables 8 depicts wages employers most frequently consider applicable for a secretary with a four year degree. Thirty-one percent of the respondents, 18 out of 58, indicated a maximum rate of pay of

9.39 or greater, 18,028.00 annually. While $6.97 was the most frequently selected rate of pay, 34 out of 58 of the respondents would pay their secretary more.

In comparison with the national average figures, ($19,968 annually), for Montana's geographic area, many employers would pay a secretary with a bachelor's degree a comparable wage.

Three employers suggested that a secretary with a four-year degree could expect to earn more than 10.61 per hour. Two respondents quoted a state scale. State employees are paid according to a grade scale based on responsibilities. One state employer indicated that the maximum Grade available for secretaries employed by the State of Montana would be Grade 12, or approximately 8.02 per hour. Most entry level professional positions require a bachelor's degree and start at Grade 11 or 12.

TABLE 9
EMPLOYERS INDICATING A MAXIMUM HOURLY WAGE GREATER THAN $9.39
STRATA DISTRIBUTION

Explanation	frequency	percentage
Stratum One	8	44
Stratum Two	7	39
Stratum Three	3	17
TOTALS	18	100%

Of the 18 employers willing to pay a secretary with a bachelor's degree, 9.39 per hour or greater, 8, (44 percent),

were from Stratum One. Distribution by Strata of employers agreeing to pay a four-year degree secretary 9.39 per hour, (15,705.60 annually), is explained in Table 9. Employers living and working in Montana's larger cities, (Billings, Great Falls, Missoula, Bozeman, Kalispell, Butte, Havre and Helena), would pay a more desirable wage than employers in smaller communities.

TABLE 10
SECRETARIAL SKILLS BENEFICIAL TO EMPLOYERS

Skill	Would Benefit	Would Not Benefit
Administrative Assistance	93.1	6.9
Set up manual files	93.1	6.9
Maintain computer files	91.4	8.6
Set up computer file	89.6	10.4
Spreadsheet	84.5	15.5
Database Management	84.5	15.5
Maintain manual files	84.5	15.5
Public Relations	78.9	12.1
Time management	77.6	22.4
Office management	75.9	24.1
Computer graphics	75.9	24.1
Computer shorthand	62.1	37.9
Electronic Mail	62.1	37.9
Facsimile	60.3	39.7
Supervise personnel	56.9	43.1

Of the fifty-eight respondents willing to hire a secretary with a bachelor's degree, approximately 89.6 percent indicated a need for their secretary to set up computer files; 93.1 percent indicated a need for their secretary to set up

manual files. Table 10 illustrates skills employers surmised would be beneficial for a secretary to obtain. Suggestion for skills not on the list included research, report writing and the ability to arrange seminars.

TABLE 11
TECHNOLOGIES TO BE CONSIDERED IN THE CONTEXT OF A FOUR-YEAR SECRETARIAL TECHNOLOGY CURRICULUM

Subject	Disagree	Neutral	Agree
Organizational Skills	.0	.0	100.0
Word Processing	.0	.0	100.0
Written Communication	.0	.0	100.0
Spelling/Grammar	.0	.0	100.0
Confidentiality	.0	1.5	98.5
Computer Usage	.0	3.3	96.6
Time Management	1.7	5.0	93.3
Office Procedures	.0	7.0	93.0
Typewriting	.0	8.2	91.8
Telephone Techniques	.0	11.3	88.7
Interpersonal Skills	.0	11.5	88.5
On The Job Training	.0	11.9	88.1
Manual Filing	5.0	15.0	80.0
Administrative Skills	3.8	20.8	75.4
Office Machines	3.3	23.3	73.4
Accounting	3.7	25.3	71.0
Personal Development	2.8	30.4	66.8
Telecommunication	1.7	37.3	61.0
Fast note Taking	12.5	34.4	53.1
Machine Transcription	11.7	36.7	51.6
Supervisory Skills	8.4	40.7	50.9
Reprographics	9.3	42.6	48.1
Bilingual Ability	48.3	46.7	5.0

Table 11 exemplifies technologies to be considered in the context of a four-year post secondary secretarial curriculum. The 58 respondents who indicated that they would hire a secretary with a bachelor's degree were asked to identify desired skills or traits they would most like to see

incorporated into the curriculum for the bachelor of science degree in secretarial technology. The most highly rated subjects were organizational skills, word processing skills, written communications, and spelling/grammar.

Eighty percent of the respondents considered manual filing a necessary part of the secretarial curriculum. Approximately 73.4 percent deemed office machines a desireable skill. Machine Transcription rated a 51.6 percent.

Most employers considered bilingual ability an unnecessary part of the secretarial curriculum. One employer suggested that with all the other skills needed, bilingual ability should be given a low propriety. Another employer mentioned that bilingual ability was not needed or important in Montana.

Approximately 88.1 percent of the respondents would like to see on-the-job training included in the four year secretarial curriculum.

One employer mentioned that the decision to hire a secretary with a four-year degree would depend of how the curriculum uniquely qualified a secretarial technologist better than the current secretarial training. Another employer expressed frustration with the written communication skills of secretaries. "It is hard to find anyone between 22 and 30 (years of age) who can spell."

Other employer comments focusing on the curriculum for the four-year degree included the ability to handle clients,

an understanding of the business that he or she is working for, good grooming, confidentiality, and loyalty to the business and employer.

One employer declared shorthand "a must", while 53.1 percent acknowledged fast note taking a desired skill to be included in the curriculum.

Secretarial Students

Questionnaires were sent to all students enrolled in the Secretarial Technology Associate of Science Degree program at Northern Montana College.

TABLE 12
SUMMARY OF STUDENT RESPONDENTS

Students Responding	Amount	Percent
Usable Returns	39	85
No Response	7	15
Totals	46	100%

A total of 46 students were enrolled Fall Quarter, 1988, in the Secretarial Technology Associate of Science Degree program. Eighty-five percent, (39 out of 46) students responded. As illustrated on Table 12, all returns were considered usable.

TABLE 13
MARITAL STATUS OF RESPONDENTS

Marital Status	f	Percent
Single	15	39
Married	12	31
Single Head of Household	11	30
Totals	38	100%

An isolated section of the questionnaire was designed to develop a profile of the Northern Montana College secretarial student. After being assured of confidentiality, this section

was denoted as an optional part of the questionnaire. Only one student of the 39 responding declined to complete the section.

Marital status is noted on Tables 13. Thirty-nine percent of the respondents were single, 31 percent were married, and 30 percent were single heads of their households.

TABLE 14
AGE GROUPS OF RESPONDENTS

Age Group	f	Percent
18-23	21	55
24-29	5	13
30-35	6	16
35-40	2	5
Over 40	4	11
Totals	38	100%

Fifty-five percent of the respondents were less than 23 years of age, 13 percent were between the ages of 24 and 29, 16 percent were between the ages of 30 and 35, five percent were between the ages of 35 and 40, and ten percent were over 40 years of age. Table 14 notes age groups of the respondents.

TABLE 15
GEOGRAPHIC ORIGINS OF THE SECRETARIAL STUDENT
AT NORTHERN MONTANA COLLEGE

Location	f	Total Percent
Northern Montana		
Havre	31	67.4
Harlem	1	
Malta	2	
Box Elder	1	
Nashua	1	
Chester	1	
Browning	1	
Whitewater	2	19.6
	40	87.0
Western Montana		
Kalispell	1	
Libby	1	
	2	4.3
Central Montana		
Great Falls	1	
Cascade	1	
Dutton	1	
	3	6.5
Out-of-State	1	2.2
	46	100.0

A student information report obtained through the Office of the Registrar at Northern Montana College showed that 31 or 67.4 percent of the students enrolled in the secretarial program declared Havre, Montana, as their permanent residence. Nine out of 46 (19.6 percent) were from Northern Montana, two

out of 46 (4.3 percent) were from Western Montana, and three, (6.5 percent) were from Central Montana. Only one student from out-of-state was represented. Table 15 illustrates geographic origins of students currently enrolled in the Associate of Secretarial Science program at Northern Montana College. The majority of secretarial students attending Northern Montana College come from communities in Northern Montana.

TABLE 16
RESIDENTIAL PLANS AFTER GRADUATION

Explanation	f	Percent
Remaining in Montana	28	72
Leaving Montana	7	18
Undecided	4	10
Total	39	100%

As described in Table 16, twenty-eight of the 39 respondents (72 percent) presupposed to remain in Montana after completing their secretarial program. Eighteen percent plan to leave the State, while ten percent were undecided. The majority of the respondents intended to remain in Montana after graduation.

TABLE 17
PREFERRED LOCATIONS FOR SEEKING EMPLOYMENT
IN THE STATE OF MONTANA

Location	f	Percent
Havre	14	37.8
Billings	5	13.5
Great Falls	4	10.8
Missoula	2	5.4
Bozeman	1	2.7
Helena	1	2.7
Conrad	1	2.7
Nashua	1	2.7
Undecided	8	21.6
Totals	37	99.9%

Respondents were asked which Montana city they would prefer to seek employment in after graduation. Fourteen of 37 respondents desired employment in Havre; five students selected Billings; four students mentioned Great Falls; two students referred to Missoula; one student each mentioned Nashua, Bozeman, Conrad, and Helena as preferred locations. Table 17 represents the respondents preferred locations for seeking employment in the State of Montana.

Students displaying plans to leave Montana for employment after graduation entertained employment prospects in South Dakota, California, Washington State, Indiana, Utah, and Minnesota.

TABLE 18
SUMMARY OF RESPONDENTS PLANNING TO FURTHER THEIR EDUCATION

Explanation	f	Percent
Continuing Education	26	66.7
Not Continuing Education	10	25.6
Undecided	3	7.6
Totals	29	99.9%

Table 18 illustrates that 66.7 percent of the respondents plan to further their education after completing the associate degree in secretarial science. The majority of the respondents will pursue higher degrees in education.

TABLE 19
DEGREES SELECTED FOR FURTHER STUDY

Degree	f	Percent
B.S. in Business Education	4	13.8
B.S. in Business Management/ Administration	11	37.9
B.S. in Secretarial Technology	5	17.2
Others	9	31.0
Totals	29	99.9%

Table 19 depicts degrees the respondents were considering. Eleven of the 29 students responding to the question selected the Bachelor of Science Degree in Business Management/Administration; four of the respondents selected the Bachelor of Science Degree in Business Education; five respondents chose the Bachelor of Science Degree in Secretarial Technology.

Other degrees mentioned but not on the list included nursing, accounting, medical records, counseling, art, and paralegal.

TABLE 20
EXPECTED MAXIMUM RATE OF PAY FOR SECRETARIES WITH AN ASSOCIATE DEGREE

Hourly Rate of Pay	Annual Rate of Pay	f	Percent	Total Percent
$ 4.55	$ 8,736.00	2	5.2	
5.76	11,059.20	9	28.2	
				33.4
6.97	13,382.40	13	33.3	33.3
8.18	15,705.60	13	33.3	33.3
Totals		39		100.0%

One third of the respondents expect to earn a maximum of $8.18 per hour, ($15,705.60 annually), after completing their associate degree. One third considered an hourly rate of $6.97, ($13,382.40 annually), as an acceptable rate of pay; eleven respondents expect to earn a maximum hourly rate of $5.76, ($11,059.20 annually); two respondents checked $4.55, ($8,736.00 annually), as an acceptable rate of pay.

Table 20 illustrates respondents expectation for compensation after completing the two-year program in secretarial technology. Two-thirds of the respondents expect to earn an annual wage of at least $13,382.40.

TABLE 21
ENROLLMENT INTEREST IN THE BACHELOR OF SCIENCE DEGREE
IN SECRETARIAL TECHNOLOGY

B.S. in Secretarial Technology	f	Percent
Would have enrolled	25	64
Would not have enrolled	14	36
Totals	39	100%

Table 21 illustrates that twenty-five, 64 percent, of the respondents said that had the Bachelor of Science Degree in Secretarial Technology been available at Northern Montana College they would have enrolled that program. Many students currently enrolled in the two-year secretarial program at Northern Montana College would pursue a bachelor's degree in secretarial technology if it were available at Northern Montana College.

TABLE 22
ACCEPTABLE RATE OF PAY FOR SECRETARIES
WITH A BACHELOR'S DEGREE

Hourly Rate of Pay	Annual Rate of Pay	f	Percent	Total Percent
$4.55	$ 8,736.00	0	0.0	
5.76	11,059.20	2	5.1	
6.97	13,382.40	3	7.7	
				12.8
8.18	15,705.60	16	41.0	41.0
9.39	18,028.80	5	12.8	
10.60	20,352.00	9	23.1	
> 10.61		4	10.3	
				46.2
Totals		39		100.0

Student respondents selected $8.18, ($15,705.60 annually), most frequently as their expected rate of pay after completing a bachelor's degree in secretarial science. Approximately 46.2 percent of the student respondents expected to earn more than $8.19 hourly. Table 22 depicts wages students most frequently considered acceptable for a secretary with a four-year degree. The respondents expected higher wages with a bachelor's degree.

FIGURE 2

WAGE EXPECTATIONS FOR A SECRETARY WITH A BACHELORS OF SCIENCE DEGREE

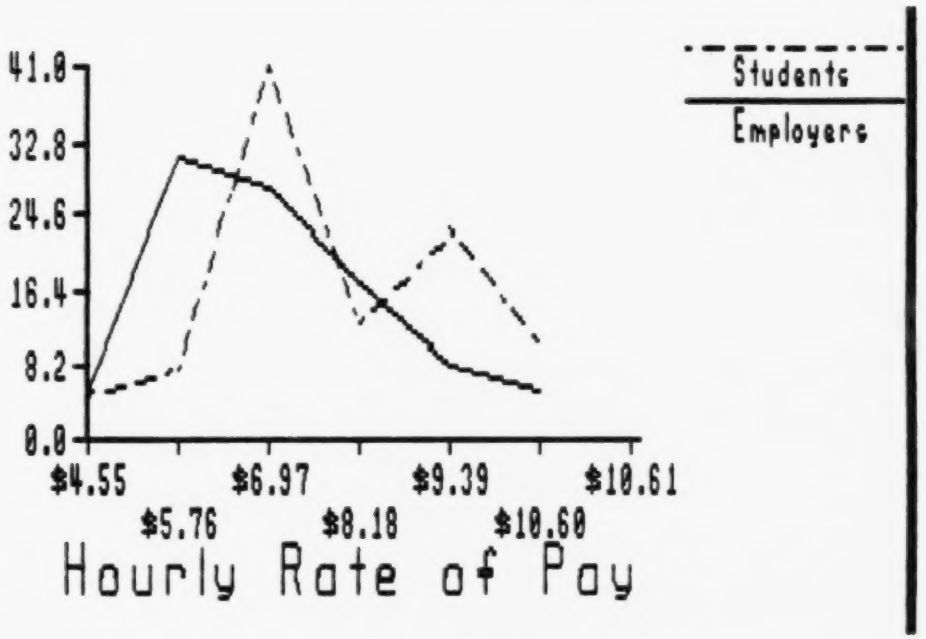


Figure 2 compares compensation employers are willing to offer a secretary with a Bachelor of Science Degree in Secretarial Technology with wage expectation of secretarial students if they had such a degree. Approximately 87 percent of the student respondents expected an hourly rate of $8.18 or greater, while 62 percent of the employer respondents considered $8.18 or more per hour an acceptable wage. Student respondents expected to earn a higher wage than employer respondents expected to pay.

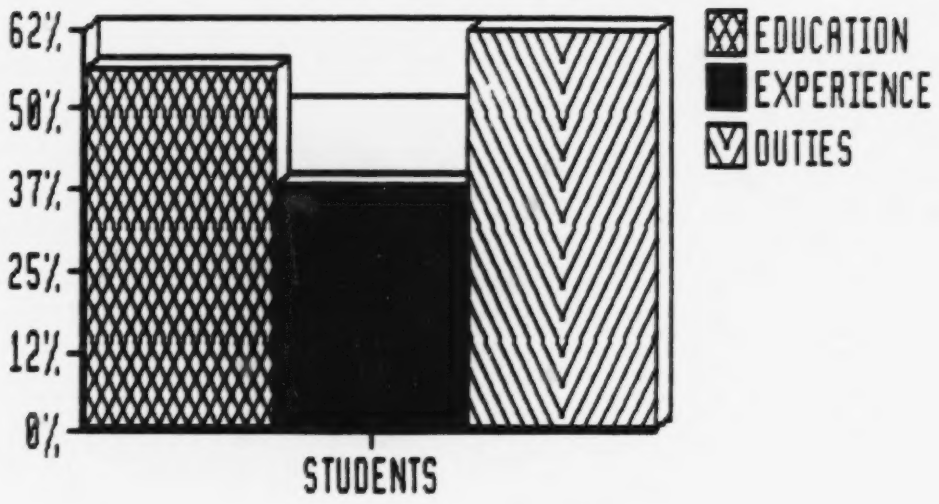
TABLE 23
IMPORTANCE EMPLOYERS SHOULD PLACE ON
EDUCATION AND EXPERIENCE WHEN HIRING A SECRETARY

Subject	Not Important	Somewhat Important	Important	Very important
Education	0%	13%	46%	41%
Experience	3%	23%	28%	46%

Table 23 shows how much importance the respondents felt employers should place on experience and education when selecting a secretary. Forty-one percent, (16 out of 39), considered education very important; forty-six percent, (18 out of 39) considered experience very important.

FIGURE 3

FACTORS INFLUENCING SECRETARIAL WAGES
STUDENT PERSPECTIVE



In rating the influence education, experience, and duties should have in determining wages, 62 percent of the respondents felt that duties should have the most influence. Education rated second with 56 percent, and experience rated third with 38 percent of the respondents considering it influential. Figure 3 demonstrates how the students deemed education, experience, and job duties should reflect secretarial wages.

FIGURE 4

COMPARING FACTORS INFLUENCING SECRETARIAL WAGES
STUDENT AND EMPLOYER RESPONDENTS

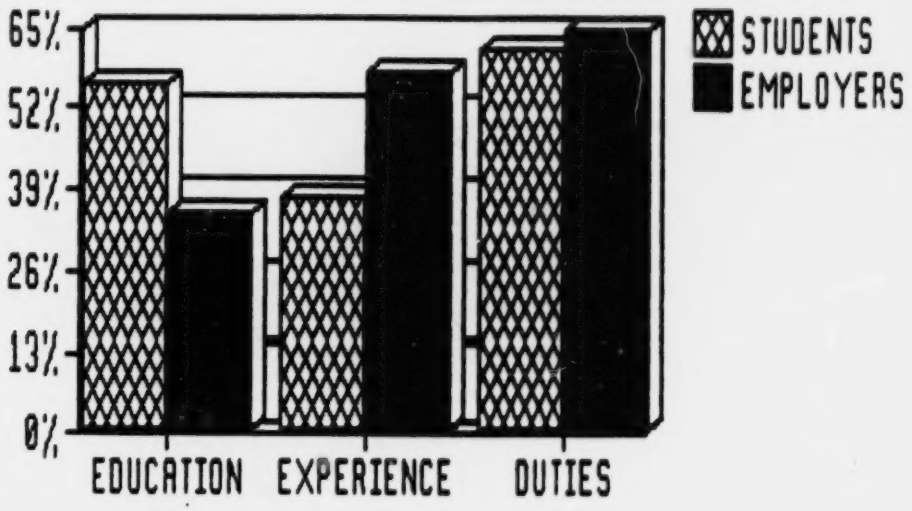


Figure 4 draws a comparison between factors students and employers rated with regard to their influence on secretarial wages. Both student and employer respondents felt that job duties should be highly considered in determining wages.

However, disagreement was expressed in weighing the influence of education and experience. Employers allowed experience more influence than education; conversely, students considered education over experience.

TABLE 24
AREAS OF OFFICE SPECIALIZATION
STUDENT PREFERENCE

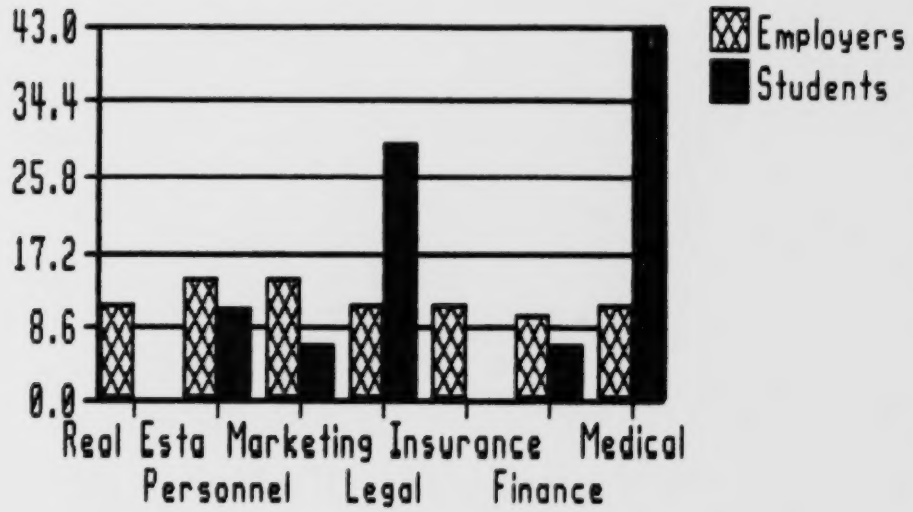
Area of Specialization	f	Percent
Real Estate	0	.0
Personnel	5	10.6
Marketing	3	6.4
Legal	14	29.8
Insurance	0	.0
Finance	3	6.4
Medical	20	42.5
Other	2	4.3
Total	47*	100.0

*Many of the students indicating a preference for office specialization selected more than one area of interest.

Twenty students marked medical training as an area of interest for specialized office training. Table 24 illustrates areas of interest student respondents selected from a list on office specialization. Fourteen students selected legal training; five mentioned specialization in personnel; three students each selected areas of specialization in marketing and finance. Other areas mentioned but not on the list included office management and executive assistance.

FIGURE 5

STUDENT INTEREST VS. EMPLOYERS NEEDS
IN OFFICE SPECIALIZATION



A comparison was made between areas of student interest in office specialization and employer needs for office specialization on Figure 5. Students indicated no interest in specializing in real estate or insurance. The greatest student interest was in the medical area. Nearly 30 percent mentioned an interest in the legal profession; 10.6 percent selected personnel; 6.4 percent selected both marketing and finance.

Eleven percent of the responding employers indicated a need for office specialists in both real estate and insurance. While eleven percent indicated a need for a medical office specialist, the greatest employer interest was in personnel and marketing.

Students were interested in specializing in the legal and medical areas. (NMC currently offers office specialization courses in the legal and medical areas, which may have influenced student choice.) Little student interest was expressed in the areas of insurance, real estate, and personnel, areas most frequently requested by employers.

TABLE 25
EFFECTS OF ELIMINATING THE ASSOCIATE OF SCIENCE DEGREE IN SECRETARIAL TECHNOLOGY

Explanation	f	Percent
Would Enroll at NMC	25	64
Would Not Enroll at NMC	14	36
Total	39	100

The students surveyed were asked several questions on the status of degrees in office education offered at Northern Montana College. Table 25 shows that 36 percent of the respondents would not have enrolled at Northern Montana College if the associate degree in secretarial science had not been available. Sixty-four percent said that they would have enrolled regardless of the availability of the associate degree in secretarial science.

TABLE 26
NORTHERN MONTANA COLLEGE SHOULD OFFER ONLY
A BACHELOR'S DEGREE IN SECRETARIAL SCIENCE

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
28.2%	15.4%	43.6%	7.7%	5.1%	100%

In responding to the type of secretarial degree Northern Montana College should offer, 5.1 percent strongly agreed that the Bachelor of Science should be the only secretarial degree offered. Table 26 illustrates that 7.7 percent, (3 out of 39), agreed; 43.6 percent, (17 out of 39), were neutral; 15.4 percent, (6 out of 39), disagreed; and 28.2 percent, (11 out of 39), strongly disagreed. Students did not agree the baccalaureate degree should be the only degree in secretarial technology available at Northern Montana College.

TABLE 27
NORTHERN MONTANA COLLEGE SHOULD OFFER ONLY
AN ASSOCIATE DEGREE IN SECRETARIAL SCIENCE

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
15.4%	41.0%	41.0%	0.0%	2.6%	100%

Table 27 demonstrates that 2.6 percent, (one out of 39), strongly agreed that Northern Montana College should retain

the two-year associate degree as the only secretarial degree. Forty-one percent, (16 out of 39) expressed neutrality; 41 percent, (16 out of 39) disagreed; and 15.4 percent, (6 out of 39), strongly disagreed.

TABLE 28
NORTHERN MONTANA COLLEGE SHOULD OFFER BOTH AN ASSOCIATE AND A BACHELOR'S DEGREE IN SECRETARIAL SCIENCE

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
2.6%	0.0%	10.2%	38.5%	48.7%	100%

The majority of the students agreed, (38.5 percent), or strongly agreed, (48.7 percent), that Northern Montana College should offer both an associate degree and a bachelor's degree in secretarial technology. Table 28 illustrates that only one student, (2.6 percent), disagreed or strongly disagreed; four students, (10.2 percent), were neutral; fifteen, (38.5 percent), agreed; and nineteen (48.7 percent), strongly agreed.

The majority of the student respondents felt that Northern Montana College should offer both an associate and baccalaureate degree in secretarial technology.

EMPLOYER SURVEY SUMMARY

Education Requirements

Eighty-five percent of the employers surveyed required some post secondary education for their secretarial help. Seventy-nine percent agreed that a two-year post secondary degree was adequate. Only three employers, 5 percent, indicated that a four-year degree would be a requisite for their office situations.

Experience Requirements

The employers responding regarded education and experience very similarly when selecting a secretary.
Forty-nine percent felt that experience was very important, while 46 percent felt that education was very important.

Secretarial Earnings

When asked which factors would be most influential in determining wages, responsibility was rated the most influential factor followed by experience; education was the least influential factor.

Approximately 78 percent of the respondents said they would hire a secretary with a bachelor's degree. The most frequently selected rate of pay for a secretary with such a degree was 6.97 per hour, ($13,382.40 annually), with 31 percent of the respondents in agreement. However, 27.6 percent implied they would pay a secretarial with a bachelor's degree 8.18 per hour, 17.2 percent indicated that they would pay 9.39 per hour, 8.6 percent considered 10.60 per hour, and

two employers, 5.2 percent said they would pay a secretary with a four-year degree over 10.61 per hour.

Skills Employers Considered Helpful

While computer skills rated high in desirable secretarial skills, 93.1 percent of the respondents indicated manual systems were still used and preferred a secretary that could set up manual files.

Computer technologies most often desired included spreadsheet, database management, and computer graphics; computer shorthand, facsimile production, and electronic mail were not rated as highly.

Employers expressed an interest in administrative assistance. Approximately, 93.1 percent declared it a helpful skill. Other skills mentioned on the list included public relations, time management, office management, and supervising personnel.

Office Specialization

Twenty-nine of the respondents indicated that their secretary works for only one executive; most employers indicated that their secretary works for more than one executive. Nearly one-half of the respondents contended that an office specialist would not benefit their firm.

Office Systems Technology Subjects

Employers were asked to consider a list of office technologies and determine if each should be taught in the context of a four-year secretarial curriculum. The most

highly rated subjects were organizational skills, word processing, written communications, and spelling/grammar with 100 percent of the respondents agreeing.

Approximately, 91.8 indicated that typewriting should be included in the curriculum; employers stressed that confidentiality should be emphasized.

Employers were in general agreement that telephone techniques, time management, office procedures, and interpersonal skills should be taught. Most employers acknowledged that on-the-job training should be considered in the context of the four-year secretarial degree.

While the majority of the respondents agreed that manual filing techniques should be taught, most disagreed that fast note taking should be part of the curriculum. Most agreed that office machines and accounting should be taught; approximately one-half agreed that machine transcription should be included in the curriculum.

Generally, employers expressed neutrality about reprographics and supervisory skills being a part of the curriculum. Strongly disagreement was conveyed for bilingual abilities as part of the curriculum. Only 5 percent agreed that bilingual ability should be part of the four-year curriculum.

STUDENT SURVEY SUMMARY

Student Profile

An optional section of the survey was used to determine marital status and age of the NMC secretarial student. Thirty-one percent were married, 30 percent were single heads of their households, and 39 percent were single. The ages of students varied over a spread of twenty years. Fifty-five percent were under 23 years of age, 13 percent were between the ages of 24 and 29, 16 percent were between the ages of 30 and 35, five percent were between the ages of 35 and 40, ten percent were over 40 years of age.

The majority of the student were from Northern Montana who planned to further their education and remain in the state after completing the associate program.

Wage Expectations

After completing the associate program, two-thirds of the students expected to earn $6.97 or greater per hour. With a bachelor's degree in secretarial technology, 87.2 percent expected an hourly rate of $8.18 or greater.

In rating the influence education, experience, and duties should have in determining wages, 62 percent felt that duties should have the most influence. Students rated education second with 56 percent, and experience third with 38 percent.

Office Specialization

Areas of office specialization most frequently selected included the legal and medical professions. Nearly 30 percent

mentioned an interest in the legal profession; 42.5 selected the medical area; 10.6 percent selected personnel; 6.4 percent selected both marketing and finance.

Student Opinion

Students were asked if they would have attended Northern Montana College had the two-year secretarial program not been available. Sixty-four percent said that they would have enrolled, but 36 percent indicated that they would not have.

Approximately, 87 percent agreed or strongly agreed that Northern Montana College should offer both an associate and a bachelor's degree in secretarial science. Sixty-four percent indicated an interest in pursuing the bachelor's degree.

UNIVERSITY SURVEY SUMMARY

The writer conducted a small survey of colleges and universities listed in Peterson's Annual Guide to Undergraduate Study, Four-Year Colleges as offering a bachelor's degree in secretarial studies. (Appendix C) The writer's intent was to review office education curricula. A survey was sent to nine institutions in the Northwestern United States; six usable responses were received.

The most frequently used title for the four-year degree in secretarial training was Bachelor of Science in Office Administration; other titles included Bachelor of Science in Administrative Systems, and Bachelor of Science in Administrative Processing.

Enrollment figures varied from 50 students to less than 20 students. Four of the universities surveyed indicated that their graduates find appropriate employment in their geographic area after graduation.

Five of the universities offer an associate degree along with the baccalaureate degree in secretarial science. Enrollment in the associate programs varied from 75 to less than 20 students. All of the universities offering both degrees indicated that students finishing the associate program frequently continue on to complete the baccalaureate program.

General Education requirement stress English, Speech, and the Humanities. Social Science, Mathematics, and Science were also General Education requirements for all responding schools.

Most universities did not include an internship as part of the core curriculum for the four-year degree; however, an internship was frequently available as an option.

Manual filing was taught as a separate course in five of the responding schools; one school included manual filing in Office Procedures. The most frequently given title for the course teaching manual filing was Information Management. Concepts dealing with the automation of micrographies, (COM, CIM, and CAR), were introduced in this course. In addition, discuss in telecommunications, electronic mail, and facsimile were included.

Five of the schools indicated that shorthand was taught as a separate course; however, one school mentioned that it was being dropped from the program. Supervisory skills, telephone techniques, time management, and organization skills were typically included in courses titled Office Management, Principles of Management, or Secretarial Procedure.

A strong background in computer usage, especially word processing, was evident in the curriculum of all the responding schools.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to examine the feasibility of offering a four-year degree in post secondary secretarial technogolgy at Northern Montana College, Havre, Montana. A secondary purpose was to assess present office education curricula and to develop a curriculum for the Bachelor of Science Degree in Secretarial Technology.

To achieve these purposes, questionnaires were sent to 150 employers throughout Montana from which 74 usable returns were received. In addition, a second questionnaire was developed to abstract student interests; this questionnaire was sent to 46 students enrolled in the Secretarial Technology Associate of Science Degree at Northern Montana College. Thirty-nine usable returns were realized. These responses were tabulated and analyzed in Chapter 4. The findings were then related to the review of literature, and recommendations were then made in Chapter 5.

CONCLUSIONS

The research findings have led to the identification of the following trends in secretarial training or education at the post secondary level.

1. Montana employers prefer a secretary with post secondary training/education. A two-year degree meets the post secondary educational requirement of most employers.

2. Secretaries entering the job market can expect to work for more than one executive. An office specialist may not be paid more than a general secretary.

3. Montana employers regard education and experience similarly when selecting a secretary. Job responsibilities are considered more influential than experience or education in determining secretarial wages.

4. Montana employers would hire a secretary with a bachelor's degree. However, the secretary may need to consider working in one of Montana's larger communities to obtain a desirable wage.

5. While computer use continues to grow, many Montana offices use manual files and require a secretary to set up or maintain one.

6. The importance of written and oral communication skills in the secretarial curriculum is evident.

7. Many students enrolled in the Associate of Science Degree in Secretarial Technology at Northern Montana College will seek higher degrees in business.

8. The Northern Montana College secretarial student is typically a nontraditional student from Northern Montana.

9. Students concurred that Northern Montana College should offer both an associate and a bachelor's degree in secretarial technology.

10. Students and employers agree that job responsibilities should be the most influential factor affecting secretarial wages. Students regard education more influential in determining wages; employers consider experience more influential.

11. Employers expressed a desire for office specialization in insurance, personnel, real estate, and marketing; students preferred to specialize in the medical and legal professions.

12. Student wage expectations are somewhat higher than employers consider as acceptable compensation.

13. Students are interested in pursuing a four-year degree in office education.

RECOMMENDATIONS

Based on the findings of the study and the review of literature, the writer makes the following recommendations:

Recommendation 1

The writer recommends the following curriculum for the Associate of Science Degree in Secretarial Technology at Northern Montana College:

SECRETARIAL TECHNOLOGY
Associate of Science Degree

Freshman Year		Recommended Quarter Credit Hours
BUED 121	Speed Writing 1	3
BUED 122	Speed Writing 11	3
BUS 100	Introduction to Business	3
BUED 131	Business Math	3
BUED 142	Introduction to Word Processing	3
BUS 261	Principles of Accounting 1	3
**BUED	Information Management	3

Sophomore Year		Recommended Quarter Credit Hours
**BUED	Advanced Word Processing Applications	3
*BUED 238	Office Machines	3
*BUED 240	Information Processing	3
BUED 184	Health Services Terminology 1	3
	OR	
BUED 215	Legal Terminology	
BUED 241	Office Procedures	3
BUS 271	Business Law 1	3
BUED 185	Health Service Terminology 11	3
	OR	
BUS 272	Business Law 11	3
BUED 248	Business Communications	
BUED 120	Personal Development	3
BUED 243	Simulated Model Office	3
	OR	
BUS 279	Cooperative Education	
BUS 245	Personal Finance	3

*Course adapted
**New course

The recommended curriculum involves deleting BUED 100, Keyboarding, as a required course. Students in need of keyboard skills should be advised to take BUED 100 as an elective the first quarter of their freshmen year.

The following course changes should be made to the current secretarial technology curriculum at Northern Montana College:

1. BUED 240 Information Management. It is recommended that the name of this course be changed to BUED 240 Information Processing. The course should remain a hands-on microcomputer course featuring integrated microcomputer applications, and theoretical knowledge in telecommunication, facsimile, and electronic mail.

2. BUED 238 Automated Office. The writer suggests a credit change from six quarter credits to three quarter credits and that the course name be changed to BUED 238 Office Machines. The name change is based on recommended alterations in the course content. Rather than emphasis on microcomputer word processing and computer shorthand, this course should include advanced typewriting on electric or electronic typewriters, machine transcription, and hands-on instruction on the 10-key calculator. The instructor should consider hands-on copying practices if equipment is available.

Current literature and an analysis of employer needs suggests typewriting is a necessary skill. Many employers expect typewriting speeds of 70 words per minute; current word

processing and keyboarding classes will not encourage the kinetics necessary to achieve such speeds.

The following new courses should be added to the Associate of Science Degree Secretarial Technology curriculum at Northern Montana College:

1. Information Management. This course should be designed to instruct the student in methodology for controlling business information. Instruction should include methods for controlling creation, coding, filing, retrieving, archive storage, and the disposition of business records.

Concepts such as telecommunications, reprographic management, electronic mail, facsimile, and micrographies including CAR, (Computer Aided Retrieval), COM, (Computer Output Microfilm), and CIM, (Computer Input Microfilm), should be included in this course.

The course should emphasize information management through management principles and highlight careers in information management. It is recommended that this course be offered for three quarter credits.

Current literature and the employer survey illustrate the importance of secretaries developing and maintaining manual files. Over 90 percent of the responding employers indicated that they use manual files and would required a secretary to set-up or maintain one.

2. Advanced Word Processing Applications. The curriculum for this class should be designed to replace the

subject content from the Automatic Office. It should incorporate microcomputer word processing, computer shorthand, keyboarding composition, and transcription practices.

In selecting the software, the instructor must keep in mind the fast changing software industry and select the appropriate software that will meet the needs of the student and the community. Significance should be placed on word processing terminology, procedures and systems to assure transferability. Students should be encouraged to evaluate software to enable effective decision making regarding software purchases. It is recommended that this course be offered for three quarter credits.

Recommendation 2

In regard to a four-year degree in secretarial technology, the writer makes the following recommendations:

1. Northern Montana College should pursue the acquisition of a four-year degree in secretarial technology. An analysis of current Business curriculum indicates that few courses would have to be created to provide a practical curricula for a bachelor's degree in secretarial technology. Therefore, faculty requirements would be affected only slightly. Student interest and opinion support the acquisition of a bachelor's degree in secretarial technology at Northern Montana College.

Although the employer survey does not support the acquisition of the baccalaureate degree, the writer makes this recommendation based on student interest, an analysis of faculty needs, and because the program has the support of the current administration. In addition, the writer considered that terminology used on the employer survey may have confused employers as to the administravie capabilites of a graduate of the baccalaureate degree in secretarial technology.

2. The degree should be entitled "Office Administration" to avoid confusion in the actual capabilities of graduates of the program. Graduates will have an adequate background in office skills as well as administrative capabilities such as management and finance.

3. The following curriculum should considered for adoption by a committee of business educators, employers, and secretaries:

OFFICE ADMINISTRATION
Bachelor of Science Degree

Freshman Year		Recommended Quarter Credit Hours
BUED 121	Speed Writing 1	3
BUED 122	Speed Writing 11	3
BUS 100	Introduction to Business	3
BUED 131	Business Math	3
BUED 142	Introduction to Word Processing	3
COMP 118	Computer Applications	3
*BUED	Information Management	3
BUED 120	Personal Development	3

Sophomore Year		Recommended Quarter Credit Hours
BUS 261	Principles of Accounting 1	3
*BUED	Advanced Word Processing Applications	3
*BUED 238	Office Machines	3
*BUED 240	Information Processing	3
BUED 241	Office Procedures	3
BUS 271	Business Law 1	3
BUS 272	Business Law 11	3
BUED 248	Business Communications	
BUS 267	Principles of Management	3
BUED 243	Simulated Model Office	3
	OR	
BUS 279	Cooperative Education	
BUS 245	Personal Finance	3
COMP 285	Spreadsheet Applications 1	3
COMP 171	Database Applications 1	3
ECON 241	Principles of Economics	6

Junior Year		Recommended Quarter Credit Hours
COMP 330	Applied Graphics Software	3
COMP 385	Spreadsheet Applications 11	3
COMP 371	Database Applications 11	3
ENGL 337	English Grammar	3
ENGL 306	Technical Writing 1	3
BUS 302	Computer Assisted Accounting	3
BUS 306	Organizational Behavior	3
BUS 311	Business Statistics 1	3
BUS 312	Business Statistics 11	3
BUS 332	Human Resources Management	3

Senior Year		Recommended Quarter Credit Hours
ENGL 425	Advanced English Grammar	3
BUS 405	Business Ethics	3
BUS 406	Financial Management	6
BUS 420	Business Policies	3
**BUED	Office Administration	3
BUS 406	Cooperative Education	6

*See changes in Recommendation 1
**New Course

Selective List

**Real Estate Law		3
**Practices in Insurance		3
BUED 100	Keyboarding	3
FREN 105	Elementary French	3
BUED 184	Health Services Terminology 1	3
BUED 185	Health Services Terminology 11	3
BUED 215	Legal Terminology	3
BUS 265	Income Tax Procedures	3
FREN 205	Intermediate French	3
FREN 305	Adv Composition and Conversation	3
ENGL 307	Technical Writing 11	3
BUS 300	Managerial Accounting	3
BUS 305	Income Tax for Small Business	3
BUS 310	Investments	3
BUS 335	Principles of Marketing	3
BUS 340	Money and Banking	3
BUS 414	Marketing Research	3
BUS 416	New Venture Development	3

The following new courses should be added to the Business curriculum at Northern Montana College in order to incorporate the Bachelor's of Science in Office Administration into current degree offerings:

1. Office Administration. This capstone course in the four-year degree should include discussion of the changing office environment, facility design and safety, and case problems in administrative decision making. It is recommended that this course be assigned a 400 course prefix, and be offered for three quarter credits.

2. Real Estate Law. When a sufficient number of students have expressed an interest in real estate specialization, this course should be available. Focus on class content should be current law and taxation affecting the buying and selling of real estate.

Offering this course as a seminar should be considered. If current faculty are not available to teach this course when necessary, practicing industry specialists should be considered as guest faculty or as guest speakers. The course should be an upper level course with a 300 or 400 prefix, and available for three quarter credits.

3. Practices in Insurance. This course should available when students have indicated a desire to specialize in the insurance area. Course content should emphasize types of insurance and procedures in the insurance office. If current faculty are not able to teach this course, guest faculty or guest speakers should be considered for a seminar class type setting. It should be an upper level course with a 300 or 400 prefix, and available for three quarter credits.

Recommendation 3

Program faculty and supporting administration should work closely with the Director of Admissions or other public relation groups within the college setting to market the program and encourage enrollment. Positive public relations may be developed by employing the following methods:

1. Area employers should be invited to review the purposed curriculum. Whenever possible valid suggestions should be incorporated into the curriculum.

2. High school students enrolled in office education course should be invited on campus for a tour of the business department. Faculty should be available to answer questions and to demonstrate computer laboratories.

3. Faculty should be willing to visit high school classes or clubs involved in office occupations. Faculty should consider bringing current positive students or inviting successful graduates to these visits.

4. Electronic and paper media should be used to inform potential students of degrees in office education available at Northern Montana College.

BIBLIOGRAPHY

Bureau of Labor Statistics, Occupation Outlook Handbook, 1988-89 edition. United States Dept. of Labor. April 1988:245-47.

"Bureau of Labor Statistics Projects 9.6% Increase in Secretarial Jobs by 1995." The Secretary, Oct. 1986:5-9.

Chadron State College, Chadron, NE, Department of Business Education.

Clayton, Dean, and Park, Ok. "Integrating Technological Changes into the Four-year College Curriculum." National Business Education Association Yearbook, n25, 1987:73-81.

Cleveland, Nancy A. Walla Walla College, College Place, WA, Office Administration Department

College Entrance Examination Board., The College Handbook, 1988.

Fusselman, Kay., "Secretaries: A Profile." The Secretary. Aug/Sept 1987:9-10.

Fusselman, Kay., "Job Market for Secretaries Exceptionally Strong." The Secretary. Jan. 1988:14-16.

Good, Carter Victor., Dictionary of Education, 2d Edition. New York, McGraw-Hill, 1959.

Hall, Trish., "A Changing World for Secretaries." New York Times, v.137, 27, April 1988:29.

Jimeno, Cheri Annette., "Integrating Office Systems Technology into the Business Education Curriculum at the Two-year Postsecondary Level". A professional paper submitted to the College of Business, Montana State University, August 1984:52-60.

Johnson, Ron., Northern State College, Aberdeen, SD, Department of Business Education.

Midland Lutheran College, Fremont, NE, Department of Business Education.

Montana, Employment, Wages and Contributions: Annual Average 1987, v.1, n5. Research and Analysis Bureau, Department of Labor & Industry, State of Montana, July 1988.

Montana, State of. Administration, Department of. Personnel, Division of. "Pay-Matrix, 1987-1989", May 29, 1987.

Montana, State of. Commerce, Department of. Montana Promotion Division. "1987-88 Official Highway Map."

Northern Montana College Catalog: 1988-1990., N44, September, 1988:24-25, 47, 60, 126, 144-168.

Perry, Howans., Black Hills State College, Spearfish, SD, Department of Business Education.

Peterson's Annual Guide to Undergraduate Study, Four-Year Colleges., 18th Edition, Princeton, NJ, 1988.

"Secretaries Seek Soaring Salaries." USA Today, v116, July 1987:9.

Snyder, Thomas D., Digest of Educational Statistics 1987, U.S. Department of Education, Office of Educational Research and Improvement. 1987:175-223.

Tilton, Rita S., Jackson, Popham., Secretarial Procedures and Administration, Ninth Edition, South-Western Publishing Co., Cincinnati, Ohio, 1987.

Urbaniak, Anthony., "The Pros and Cons of Two-year Versus Four-year Degrees." Journal of Business Education. Feb. 1985:203-06.

Valley City State College, Valley City, ND, Department of Business Education.

White, Shirley A., "An Analysis of Secretarial Employment Ads with Implications for Curricular Modification." American Research Association. New York, NY March 20, 1982.

APPENDIX A

October 28, 1988

Dear Montana Employer

Advances in technology have drastically altered the office needs of employers throughout the nation. Consequently, training programs for office workers need to be analyzed in order for educational institutions to meet the changing needs of employers of their graduates.

A review of the current literature indicates a changing role for secretaries. This forecast has been used as the basis for the various questions on the enclosed questionnaire. As a result of this study, a recommendation will be made which will help post secondary educators in Montana determine the feasibility of revising current curriculum to include a Bachelor of Science Degree in Secretarial Technology.

We would appreciate your taking a few minutes of your time to complete the enclosed questionnaire and return it to us by November 15 in the enclosed stamped, self-addressed envelope. All returns will, of course, be kept confidential.

We look forward to your response.

Sincerely

Garnet Thackeray Bergren
Graduate Student
Department of Business Education
And Office Systems
Montana State University

Dr. Gus Korb, Director
Montana Center for
Vocational Education
Research, Curriculum and
Personnel Development

Enclosure

November 16, 1988

Dear Montana Employer

As office technology continues to grow, we are sure changes are occurring in your office. Many vocational educators are calling for an assessment of office education programs to determine if students are being adequately prepared to meet the changing needs of Montana employers.

Perhaps the questionnaire we sent you earlier arrived at an inconvenient time. This questionnaire is designed to assess current and projected office needs of Montana employers. When the study is completed, curriculum guidelines based on employer needs will be developed for post secondary office education programs, as well as determining the marketability of a Bachelor of Science Degree in Secretarial Technology.

We would appreciate your taking a few minutes of your time to complete the enclosed questionnaire and return it to us by November 30. A self-addressed, stamped envelope is again enclosed for your convenience. Your input is vital to this study. All returns will, of course, be kept confidential.

We look forward to your response.

Sincerely

Garnet Thackeray Bergren
Graduate Student
of Business Education
And Office Systems
Montana State University

Dr. Gus Korb, Director
Montana Center Department
for Vocational Education
Research, Curriculum and
Personnel Development

Enclosures

Please respond to the questionnaire as it applies to your present and future office needs.

1. What level of secretarial education/training do you feel would best benefit your organization?

____high school diploma or GED
____one-year of college
____two-year secretarial degree
____four-year secretarial degree
____graduate/advanced degree
____other_____

2. Do secretaries employed in your firm work for more than one executive?

____yes ____no

If yes, how many? _____

3. Would an industry office specialist benefit your firm?

_____yes ____no

If yes, in what area?

____real estate
____personnel
____marketing
____legal
____insurance
____finance
____medical
____other_____

4. Would you be willing to pay an industry specialist more than a general secretary?

____yes ____no

5. How important is education when hiring a secretary?

Not important very important
1 2 3 4 5 6 7 8 9 10

6. How important is experience when hiring a secretary?

Not important very important
1 2 3 4 5 6 7 8 9 10

7. Please rate the influence the following factors have in determining secretarial wages.

EDUCATION

Not influential very influential
1 2 3 4 5 6 7 8 9 10

7. (Continued)

EXPERIENCE

Not influential very influential
1 2 3 4 5 6 7 8 9 10

RESPONSIBILITIES

Not influential very influential
1 2 3 4 5 6 7 8 9 10

8. Would you consider employing a secretary with a bachelor's degree in secretarial technology?

____yes ____no

If yes, please go on to items 9, 10, and 11.

If no, please stop and return the questionnaire in the enclosed stamped, self-addressed envelope. Thank You!

9. Please indicate maximum hourly wage a secretary with a bachelor's of science degree employed in your firm can expect to earn. Assume your secretary has completed the probationary requirements of your company.

____$3.35-4.55 ____$6.98-8.18

____$4.56-5.76 ____$8.19-9.39

____$5.77-6.97 ____$9.40-10.60

____more than 10.61

10. Could a secretary with a bachelor's degree in secretarial technology assist your firm with the following? Please check the appropriate response.

____yes ____no set up computer files

____yes ____no spreadsheet
____yes ____no database
____yes ____no computer graphics
____yes ____no computer shorthand
____yes ____no electronic mail
____yes ____no facsimile

____yes ____no set up manual files
____yes ____no maintain computer files
____yes ____no maintain manual files
____yes ____no supervise personnel
____yes ____no office management

10. (Continued)

____yes ____no public relations

____yes ____no manage employer's time

____yes ____no administrative assistance

other_____

_____

11. Please respond to the following questions using the five-point scale where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5-strongly agree.

College curricula for a bachelor of science degree in secretarial technology should emphasize the following skills or traits:

	strongly disagree	disagree	neutral	agree	strongly agree
word processing skills	1	2	3	4	5
computer usage	1	2	3	4	5
organizational skills	1	2	3	4	5
written communication	1	2	3	4	5
interpersonal skills	1	2	3	4	5
accounting	1	2	3	4	5
telephone techniques	1	2	3	4	5
manual filing	1	2	3	4	5
spelling/grammar	1	2	3	4	5
bilingual ability	1	2	3	4	5
supervisory skills	1	2	3	4	5
personal development	1	2	3	4	5
confidentiality	1	2	3	4	5
time management	1	2	3	4	5
administrative skills	1	2	3	4	5
fast note taking	1	2	3	4	5
machine transcription	1	2	3	4	5
office machines	1	2	3	4	5
micrographics	1	2	3	4	5
telecommunications	1	2	3	4	5
office procedures	1	2	3	4	5
reprographics	1	2	3	4	5
typewriting/keyboarding	1	2	3	4	5
on the job training	1	2	3	4	5

comments_____

_____

'HANK YOU! Please return the questionnaire in the enclosed stamped, self-addressed envelope. If you would like an abstract summarizing the result of this survey, please check. ☐

STRATA ONE

Participating employers in Strata One were as follows:

Yellowstone County

Billings
- Weber Dobson & Associates
- Collaborative Design Architects
- H&R Block Tax Service
- Eaton & Yost Construction Co.
- Safway Supply
- Central Montana Electric Power
- Geo-Research Inc.
- Montana-Dakota Utilites Co.
- Bureau of Indian Affairs

Huntley
- Yellowstone Valley Electric Coop

Laurel
- A. Haus of Realty Co.

Cascade County

Great Falls
- Piper Jaffray & Hopwood Inc.
- Big Sky Law Center
- Fidelity Savings & Loan
- The College of Great Falls
- Junkermier Clark Camapnella Stevens
- Business Partners Consulting
- Montana Deaconess Regional Rehab Center

Cascade
- Cascade Public Schools

Missoula County

Missoula
- Sullivan & Hunt Agency
- EKW Systems
- Action Law
- Missoula Federal Credit Union
- Missoula Blueprint Co.
- Kistler Norskog Agency

STRATA TWO

Participating employers in Strata Two were as follows:

Gallatin County

Bozeman
- McKinley Anderson
- Century 21 Bozeman Realty
- HKM Associates
- Doane-Western Company

Flathead County

Kalispell
- First Northwest Bank
- Kalispell Regional Hospital

Silver Bow County

Butte
- Western Energy Co.
- Blue Range Engineering
- Montana Power
- Brown & Associates
- KXLF-TV
- O'Keefe Drilling Co.

Hill County

Havre
- Northern Montana Hospital
- Northern Montana Medical Arts Center
- First Bank

Lewis & Clark County

Helena
- Helena School Dist. #1
- Superintendent of Public Instruction
- Montana Dept. of Social & Rehab. Services
- Molerway Freight Lines
- Montana Dept. of Commerce
- Dept. of Health & Enviromental Services
- Dept. of Military Affairs

STRATA THREE

Particpating employers in Strata Three were as follows:

Big Horn County
- Hardin
  - US Department of Agriculture

Blaine County
- Chinook
  - Inman Insurance
  - Blaine Bank of Montana
- Harlem
  - Harlem News

Beaverhead County
- Dillon
  - JH International Harvester Equipment, Inc.
  - Barret Hospital
  - Jerry Boyd, CPA
  - Public Welfare Dept of Beaverhead County

Broadwater County
- Townsend
  - Treasure State land Sales
  - Broadwater Attorney's Office

Carbon County
- Red Lodge
  - Mark Schubert, CPA

Custer County
- Miles City
  - Gratton Adjustment & Analysis

Deer Lodge County
- Anaconda
  - Mental Health Service, Inc.

Fallon County
- Baker
  - Fallon County Abstract Co.

Fergus County
- Lewistown
  - Farm Plan Corp.
  - Webster, Foster, & Weston
  - Snowy Mountain Industries

Glacier County
- Cut Bank
  - Dye Tavary & Judge Insurance & Real Estate
  - Lawrence A. Hemmer, MD

Ravalli County
Hamilton
House of Insurance
Insured Titles of Hamilton

Richland County
Sidney
Montana Bank of Sidney

Toole County
Shelby
Johnson & Hunt
High Plains Realty

Valley County
Glasgow
Glasgow City Hall
Glasgow Clinic PSC
Gerald T. Archmbeault

APPENDIX B

520 Second Avenue
Havre, MT 59501
November 4, 1988

Dear NMC Secretarial Student

Advances in technology have drastically altered the office needs of employers throughout the nation. Consequently, training programs for office workers need to be analyzed in order for educational institutions to meet the changing needs of their students.

A vital part of this process includes surveying the opinions and desires of students enrolled in office occupation programs. The enclosed questionnaire has been designed to considered those needs. As a result of this study, recommendations will be made which will help business educators at Northern Montana College revise and upgrade curriculum to better meet the changing needs of secretarial students.

I would appreciate your taking a few minutes of your time to complete the enclosed questionnaire and return it to me by November 18 in the enclosed stamped, self-addressed envelope. All returns will be kept confidential.

I look forward to your response.

Sincerely

Garnet Thackeray Bergren
Graduate Student
Department of Business Education
and Office Systems
Montana State University

Enclosures

520 Second Avenue
Havre, MT 59501
November 25, 1988

Dear NMC Secretarial Student

Advances in technology have drastically altered the office needs of employers throughout the nation. Consequently, training programs for office workers need to be analyzed in order for educational institutions to meet the changing needs of their students.

Perhaps the questionnaire I sent you earlier arrived at an inconvenient time. This questionnaire has been designed to considered the opinions and needs of students enrolled in office occupation programs. When the study is completed, recommendations will be made which will help educators at Northern Montana College analyze its office education curriculum.

I would appreciate your taking a few minutes of your time to complete the enclosed questionnaire and return it to me by December 12. A stamped, self-addressed envelope is again enclosed for your convenience. Your response is vital to this study. All returns will be kept confidential.

I look forward to hearing from you.

Sincerely

Garnet Thackeray Bergren
Graduate Student
Department of Business Education
and Office Systems
Montana State University

Enclosures

Optional--this information will be used to develop a profile of the NMC secretarial student and will remain completely confidential.

Marital Status

☐ Married ☐ Single ☐ Single--head of household

Age

☐ 18-23 ☐ 24-29 ☐ 30-35 ☐ 35-40 ☐ over 40

1. After completing your program at NMC, do you plan to remain in Montana?

   ☐ yes ☐ no

   If yes, what city?_____

   If no, what state?_____

2. As a secretary with an associate degree, what do you expect your beginning hourly wage to be?

   ____$3.35-4.55
   ____$4.56-5.76
   ____$5.77-6.97
   ____$6.98-8.18
   ____$8.19-9.39
   ____$9.40-10.60
   ____more than 10.61

3. When you complete the associate degree in secretarial science, do you plan on furthering your education?

   ☐ yes ☐ no

   If yes, which degree(s) are you considering?

   ____Bachelor of Science in Business Education
   ____Bachelor of Science in Business Management/Administration
   ____Bachelor of Science in Secretarial Technology, (not available at NMC.)
   ____Other_____

4. If a Bachelor of Science in Secretarial Technology had been available at Northern Montana College, would you have enrolled in that program?

☐ yes ☐ no

5. If the Associate of Science in Secretarial Technology had not been available at NMC, would you have enrolled at NMC?

☐ yes ☐ no

6. How much importance should employers place on education when hiring a secretary?

Not important very important
1 2 3 4 5 6 7 8 9 10

7. How much importance should employers place on experience when hiring a secretary?

Not important very important
1 2 3 4 5 6 7 8 9 10

8. Please rate the influence the following factors should have in determining secretarial wages and promotion.

EDUCATION

Not influential very influential
1 2 3 4 5 6 7 8 9 10

EXPERIENCE

Not influential very influential
1 2 3 4 5 6 7 8 9 10

RESPONSIBILITIES

Not influential very influential
1 2 3 4 5 6 7 8 9 10

9. If available, what area would you choose to specialize your secretarial training in?

____real estate	____insurance
____personnel	____finance
____marketing	____medical
____legal	____other_____(specify)

10. Please indicate maximum hourly income you would expect to earn as a secretary with a bachelor's of science degree in secretarial technology.

____$3.35-4.55	____$6.98-8.18
____$4.56-5.76	____$8.19-9.39
____$5.77-6.97	____$9.40-10.60
	____more than 10.61

Please respond to the following questions using the five-point scale where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5-strongly agree.

11. Northern Montana College should offer a Bachelor of Science Degree as the only degree in Secretarial Technology?

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

12. Northern Montana College should retain only the Associate Degree in Secretarial Technology?

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

13. Northern Montana College should offer both an Associate and a Bachelor's Degree in Secretarial Technology.

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

THANK YOU! Please return the questionnaire in the enclosed stamped, self-addressed envelope.

APPENDIX C

Post Secondary institutions with student populations less than 2,000 in the Northwestern United States that offer office education students a Bachelor of Science Degree in Secretarial Technology.

INSTITUTION	LOCATION
Midland Lutheran College	Fremont, NE
Valley City State College	Valley City, ND
Griffin College	Seattle, WA
Walla Walla College	College Place, WA
Huron College	Huron, SD
Black Hills State College	Spearfish, SD
Chadron State College	Chadron, NE
Northern State College	Aberdeen, SD
Adams State College	Alamosa, CO

520 Second Avenue
Havre, MT 59501
February 10, 1989

Dear Business Educator

For students to be prepared for the changing office environment, institutions that offer secretarial training must keep programs up to date and reflect current trends in the business world.

Peterson's Annual Guide to Undergraduate Study indicates that ^F1^ offers a Bachelor's Degree in Secretarial Technology. This study, developed as a Master's project, is an attempt to determine the feasibility of revising curriculum at Northern Montana College, in Havre, Montana, to include a Bachelor's Degree in Secretarial Technology in addition to the present associate degree.

Input from educators experienced with the four-year degree in Secretarial Technology is vital for this study. Please take a few moments to answer the enclosed questionnaire and return it in the enclosed stamped and self-addressed envelope before February 27.

At the end of the questionnaire, include your name and address if you want a summary of the findings. Your cooperation will be appreciated.

Sincerely

Mrs. Garnet Thackeray Bergren
Graduate Student
Department of Business Education
and Office Systems
Montana State University

Enclosure

520 Second Avenue
Havre, MT 59501
February 28, 1989

Dear Business Educator

For students to be prepared for the changing office environment, institutions that offer secretarial training must keep programs up to date and reflect current trends in the business world.

Peterson's Annual Guide to Undergraduate Study indicates that ^F1^ offers a Bachelor's Degree in Secretarial Technology. Perhaps the questionnaire sent to you earlier arrived at an inconvenient time. When completed, this study will serve as a basis for revising secretarial curriculum in Montana's post secondary institutions.

Input from educators experienced with the four-year degree in Secretarial Technology is vital for this study. Please take a few moments to answer the enclosed questionnaire and return it before March 14. A stamped and self-addressed envelope is again enclosed for your convenience.

At the end of the questionnaire, include your name and address if you want a summary of the findings. Your cooperation will be appreciated.

Sincerely

Mrs. Garnet Thackeray Bergren
Graduate Student
Department of Business Education
and Office Systems
Montana State University

Enclosure

1. Does your school still offer a Bachelor's degree in Secretarial Technology?

_____yes _____no

If not, why was the program discontinued?

_____funding _____declining enrollment

_____staffing difficulties _____placement problems

Other_____

_____

Please complete the questionnaire as it applies/applied to your curriculum.

2. What is the title of your four-year degree in secretarial science?

_____Administrative Assistant
_____Secretarial Technology
_____Executive Assistant
_____Executive Secretary
_____Office Manager
_____Other_____

3. How many students are majoring in your baccalaureate secretarial science program?

_____+100 _____35-49

_____75-99 _____20-34

_____50-74 _____less than 20

4. Do graduates of your baccalaureate program find employment appropriate to their training?

_____yes _____no

5. Are your graduates generally employed in your geographic area?

_____yes _____no

6. Do you offer an associate degree in secretarial technology?

_____yes _____no

If yes, how many students are majoring in this program?

_____+100 _____35-49

_____75-99 _____20-34

_____50-74 _____less than 20

Do students enrolled in the associate program for secretarial science go on to enroll in the baccalaureate program for secretarial science?

_____yes _____no

7. Does your institution operate on a quarter or a semester basis.

_____quarter _____semester

8. Please indicate quarter/semester hours required in the four-year secretarial degree under the following general education content areas?

_____English

_____Speech

_____Humanities--Art, Drama, Music, Philosophy, foreign languages.

_____Social Sciences--Economics, Geography, History, Political Science, Psychology, or Sociology.

_____Mathematics

_____Science

_____Others_____

_____

9. Please indicate quarter/semester hours required in the four-year secretarial degree under the core curriculum.

_____word processing	_____typewriting\keyboarding
_____fastnote taking	_____Business mathematics
_____Business machines	_____Business law
_____Business communications	_____Information Management
_____Personal finance	_____Business finance
_____Accounting	_____Office Management
_____Personnel Management	_____Principles of Management
_____Machine Transcription	_____Office procedures
_____Legal terminology	_____Medical terminology
_____Economics	_____Statistics
_____Income Tax	_____Business ethics
_____Personal development	_____Computer Usage

_____Other_____

_____

10. Does your four-year secretarial program require an internship for students who have not had prior related work experience?

_____yes _____no If yes, length of internship_____

Are students who have had prior related work experience required to enroll in an internship program?

_____yes _____no If yes, length of internship_____

11. Please consider the following technologies and indicate if or where they are included in the curriculum for the four-year degree in secretarial technology.

SUBJECT	a separate course	not taught	should be taught	included in (name course)
Manual Filing				
Time Management				
Supervisory Skills				
Micrographics				
COM (computer output microfilm)				
CAR (computer assisted retrieval				
CIM (computer input microfilm)				
Reprographics (copy processing)				
Telecommunications				
Telephone tech.				
Interpersonal Skills				
Organizational Skills				
Facsimile				
Computer graphics				
Shorthand				

Thank You! Please add your name and address if your would like a summary of the findings.